



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,728	03/21/2006	Osamu Hashida	NNA-240-B	6883
48980	7590	12/16/2009		
YOUNG BASILE 3001 WEST BIG BEAVER ROAD SUITE 624 TROY, MI 48084			EXAMINER LAIOS, MARIA J	
			ART UNIT 1795	PAPER NUMBER
			NOTIFICATION DATE 12/16/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@youngbasile.com
audit@youngbasile.com

Office Action Summary

Application No.

10/572,728

Applicant(s)

HASHIDA, OSAMU

Examiner

MARIA J. LAIOS

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 14-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 10-13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date 20060512
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-13 and 23, in the reply filed on 6 August 2009 is acknowledged. Claims 14-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6 August 2009.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

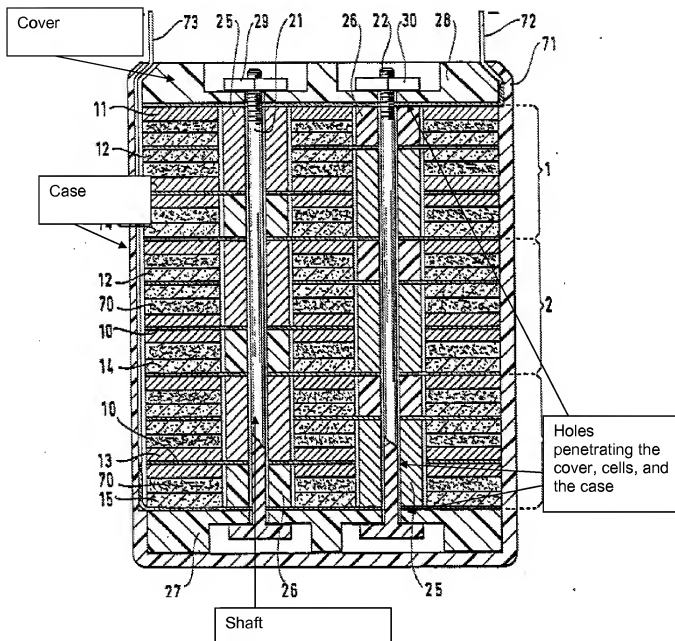
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 9, 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Descroix et al. (EP 114667 A2).

As to claims 1 and 23, Descroix et al. discloses a battery module comprising a cell unit having a plurality of cells (1, 2 and 3); a housing and cover to store the cell unit (see figure below)

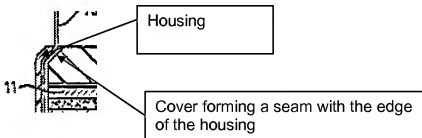


A shaft member is inserted into the holes of the cells, housing and cover and the shaft member/bolt comprises a length that allows protrusion from each of the housing and the cover (see figure above). Thus Descroix discloses a battery module with means for enclosing a plurality of cell and means for locking the shaft member to the cover.

As to claim 2, Descroix discloses a nut (lock) which locks the shaft member (bolt) to the cover.

As to claim 3, Descroix discloses a nut (lock) which is a fastening member provide at the end of the shaft member that protrudes for the cover where the nut is fastened to the cover when it is tightened to the bolt.

As to claim 9, Descroix discloses the cover and the housing are mutually locked as an edge member of the housing which forms a seam with the member of the cover (see figure below).



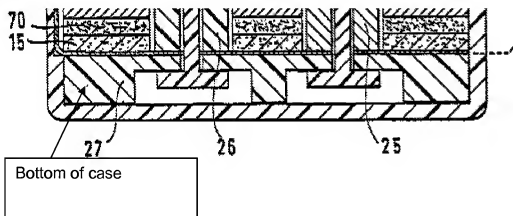
Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4-6, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Descroix et al. (EP 114667 A2).

As to claim 4, Descroix discloses a nut (lock) which is a fastening member provide at the end of the shaft member that protrudes from the cover where the nut is fastened to the cover when it is tightened to the bolt but does not disclose the nut locked to the housing (the reverse of what is shown in the figure above). However it would have been obvious to one of ordinary skill in the art at the time of the invention to reserve the nut and bolt so that shaft would penetrate from the bottom of the housing (see figure below) and a nut can be used to fasten the bolt. The operation of the device would not be modified by reversing the nut and bolt because it would still tighten the case, cover and cells together. (In re Fazda, 219F.2d 449, 104 USPQ 400 (CCPA 1955))



As to claim 5, Descroix discloses the nut which can be removed from the bolt thus providing a lock member with a structure that is free to move between a first position where insertion into the trough hole of the cell unit and into the through holes of the housing and the cover is allowed (nut is not on bolt) and a second position where

separation of the cell units and the housing and the cover from the shaft member is prevented (nut tightened on).

As to claim 6, Descroix discloses the assembly of the battery thus the shaft member doubles as a jig for insertion of the cover, the unit cell, the housing.

As to claim 8, Descroix discloses the nut (lock member) is free to move between the first and second position as the nut rotation with an axis of the shaft member (bolt) as the center.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Descroix et al. (EP 114667 A2) as applied to claims 1-3, 9, 23 above, and further in view of Yamaguchi et al. (US 5,639,257).

Descroix discloses the battery module as is taught above but does not teach the bolt (lock member) having an elastic displacement in the direction of the axis of the shaft member. Yamaguchi et al. discloses a bolt which includes a ring (44) with engaging pieces (44b). These engaging pieces deform to allow an object to be secured. Therefore it would have been obvious to one of ordinary skill in the art to replace the nut of Descroix with the ring of Yamaguchi et al. on the bolt of Descroix because this would allow for an object to be secured.

Allowable Subject Matter

8. Claims 10-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: The closest prior art of record discloses a battery module with a shaft that includes a nut and bolt but does not disclose the shaft member as a first and second shaft members interfitting upon each other as is claimed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARIA J. LAIOS whose telephone number is (571)272-9808. The examiner can normally be reached on Monday - Thursday 10 am -7 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-Wei Yuan can be reached on 571-272-1295. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/572,728
Art Unit: 1795

Page 8

/M. J. L./
Examiner, Art Unit 1795

/Dah-Wei D. Yuan/
Supervisory Patent Examiner, Art Unit 1795